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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,187	05/10/2001	Steven R. Kleiman	103.1068.01	7234
22883	7590	09/23/2005	EXAMINER	
SWERNOFSKY LAW GROUP PC			LE, UYEN T	
P.O. BOX 390013			ART UNIT	PAPER NUMBER
MOUNTAIN VIEW, CA 94039-0013			2163	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,187

Applicant(s)

KLEIMAN ET AL.

Examiner

Uyen T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 54,56-86,104,105,111-114,121-124,126-131 and 133-147 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 54,56-86,104,105,111-114,121-124,126-131 and 133-147 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6 September 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments have been fully considered but they are moot in view of the new grounds of rejection presented in this Office Action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 121-124, 126-131, 133-147 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because:

- it is not clear how a single object of shadow snapshot includes a hierarchy of file system objects as claimed in the last paragraph of claim 121
- it is not clear how a single object of storage image includes a hierarchy of file system objects as claimed in the last paragraph of claims 131, 141.

Claims 121-124, 126-131, 133-147 have not been further treated on their merit because the limitations cannot be ascertained.

### ***Claim Objections***

3. Claims 62, 72, 82, 141 are objected to because of the following informalities:
  - claim 62, line 3 —of storage blocks—has to be inserted after “said plurality”
  - claim 72, line 3, “said” has to be deleted, lines 4, 8, —of storage blocks—has to be inserted after “said plurality”
  - claim 82, line 1 “server” has to be replaced by —system—

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- claim 141, line 1 "retrieve" has to be replaced by –retrieves—.

Appropriate corrections are required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 54, 62, 72, 82, 104, 111, 114 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,604,118. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 54, 62, 72, 82, 104, 111, 114 merely recite obvious variations of claims 1-6 of U.S. Patent No. 6,604,118. Claim 82 for example recites the method of claim 1 of the US Patent with fewer limitations. Claim 54 recites the apparatus of claim 5 of the US Patent with fewer limitations. However, it is obvious to remove limitations to broaden claims. Claim 62, 72 added the limitations of snapshot being disposed as an object. However, the claimed object is not further defined in the claim language, thus is broad enough to read on the bit plane of claim 5 of the US Patent. Claims 111, 114 added the limitations of preserving a snapshot while

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copying, backing up and restoring a file system. However, any file system storing snapshots has to preserve them while copying, backing up and restoring the file system in order to allow rolling back.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered as relevant to applicant's disclosures.

Prakash et al, "Low-Cost Checkpointing and Failure Recovery in Mobile Computing Systems", IEEE 1996, pages 1035-1048.

Gendelman et al, "An Application-Transparent, Platform-Independent Approach to Rollback-Recovery for Mobile Agent Systems", Distributed Computing Systems, 2000, Proceedings. 20<sup>th</sup> International Conference on, pages 564-571.

Muller et al, "A High Performance Multi-Structured File System Design", ACM 1991, pages 56-67.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 571-272-4021.

The examiner can normally be reached on M-F 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

19 September 2005



UYEN LE  
PRIMARY EXAMINER